

IN THE UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his )  
capacity as ATTORNEY GENERAL )  
OF THE STATE OF OKLAHOMA and )  
OKLAHOMA SECRETARY OF THE )  
ENVIRONMENT C. MILES TOLBERT, )  
in his capacity as the )  
TRUSTEE FOR NATURAL RESOURCES )  
FOR THE STATE OF OKLAHOMA, )

Plaintiff, )

vs. )

TYSON FOODS, INC., et al, )

Defendants. )

4:05-CV-00329-TCK-SAJ

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VOLUME I OF THE VIDEOTAPED

DEPOSITION OF INDRAJEET CHAUBEY, PhD, produced  
as a witness on behalf of the Plaintiff in the above  
styled and numbered cause, taken on the 27th day of  
January, 2009, in the City of Tulsa, County of  
Tulsa, State of Oklahoma, before me, Lisa A.  
Steinmeyer, a Certified Shorthand Reporter, duly  
certified under and by virtue of the laws of the  
State of Oklahoma.

1 conclusion?

2 MS. LONGWELL: Object to form.

3 A There are a number of watersheds and water  
4 quality models of a level today that can be utilized  
5 to look at this type of question and see how water  
6 quality would change over time.

10:37AM

7 Q What would be an example of some of those  
8 models that could be used?

9 A You can use a model like SWAT, a SWAT water  
10 assessment tool, and AGNPS, A-G-N-P-S, HSPF. There  
11 are a number of other models.

10:37AM

12 Q Are you familiar with the GLEAMS model?

13 A I am somewhat familiar with GLEAMS model, yes.

14 Q All right. If you used a GLEAMS model with a  
15 routing equation, could that be a type of model that  
16 could run the scenario we're talking about and  
17 determine the length of time we're asking about?

10:37AM

18 MS. LONGWELL: Object to form.

19 MR. GEORGE: Object to form, lack of  
20 foundation, calls for speculation.

10:38AM

21 A You can interface the GLEAMS model, which is a  
22 field scale model, with the routing model, to  
23 represent watershed processes and use that to answer  
24 these type of question. It is possible.

25 Q Okay. Have you had an opportunity to review

10:38AM

1 any data for water quality at the Highway 59 bridge  
2 after the mass balance of 2002 was performed?

3 A I did some SWAT modeling in the same portion  
4 of the watershed where we utilized the data  
5 collected at Highway 59 bridge to calibrate and  
6 validate the model.

10:39AM

7 Q Was there a change that occurred with regard  
8 to the inputs after 2002 that you're aware of, the  
9 phosphorus inputs?

10 A Some of the point source numbers significantly  
11 changed.

10:40AM

12 Q And how did they change?

13 A The concentrations of phosphorus that was  
14 coming from the effluent discharged by the  
15 Springdale wastewater treatment plant decreased  
16 substantially, and I believe during similar time  
17 period, or it may have been slightly before that,  
18 dissolved solids also improved at the wastewater  
19 treatment plants and effluent discharge reduced from  
20 them also.

10:40AM

10:40AM

21 Q With the reduction of the wastewater treatment  
22 plants, how would that impact the respective  
23 percentages of the inputs of point and non-point  
24 sources?

25 MR. GEORGE: Object to form.

10:41AM

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VOLUME II OF THE VIDEOTAPED  
DEPOSITION OF INDRAJEET CHAUBEY, PhD, produced  
as a witness on behalf of the Plaintiff in the above  
styled and numbered cause, taken on the 2nd day of  
March, 2009, in the City of Tulsa, County of Tulsa,  
State of Oklahoma, before me, Lisa A. Steinmeyer, a  
Certified Shorthand Reporter, duly certified under  
and by virtue of the laws of the State of Oklahoma.

1 I have moved and I have not kept lots of data. Lots  
2 of that, you know, may have been updated. So it's a  
3 continual process, so I don't know.

4 Q Okay. Do you know anybody else who might have  
5 kept them?

11:27AM

6 A If it's not Kati White or Marc Nelson, then I  
7 don't know who else might have kept it.

8 Q Okay. They're my other options; right?

9 A They are your --

10 Q My only options?

11:27AM

11 A Probably your only option at this time.

12 Q Okay. Are you familiar with GLEAMS model?

13 A I am somewhat familiar with GLEAMS model.

14 Q Okay. Do you agree that the GLEAMS is a field  
15 scale model?

11:28AM

16 A Yes.

17 Q As opposed to a watershed scale model?

18 A Yes.

19 Q Okay. Do you agree that if you're going to

20 use GLEAMS as part of a modeling exercise for a

11:29AM

21 whole watershed, such as like the Illinois River

22 watershed, that it would be important that the

23 routing model that is used in conjunction with

24 GLEAMS reasonably reflect the in-stream and

25 transport processes for the system being modeled?

11:29AM

1 MR. GARREN: Object to form.

2 A For a watershed assessment using GLEAMS or any  
3 other field scale model, you need to interface that  
4 or you need to have a routing model that goes with  
5 it, and that's one way you can do a watershed scale  
6 assessment, and it's done all the time.

11:29AM

7 Q Huh?

8 A It's done all the time by a number of modelers  
9 using GLEAMS and other field scale models.

10 Q Okay, but the routing model is very important?

11:30AM

11 MR. GARREN: Object to form.

12 A Yes.

13 Q Okay. I can't remember how this was stated in  
14 your first deposition, but do you hold the opinion  
15 that if you apply poultry litter over the agronomic  
16 rate, that it's waste disposal?

11:30AM

17 A I do.

18 Q You do?

19 A Yes.

20 Q Okay. What are you -- with respect to the  
21 agronomic rate, what nutrient are you looking at;  
22 are you looking at every nutrient in poultry litter  
23 or are you just looking at phosphorus?

11:30AM

24 A I am looking at both nitrogen and phosphorus  
25 because those are the two micronutrients of water

11:30AM